BLM IDAHO POST-FIRE RECOVERY PLAN
EMERGENCY STABILIZATION AND BURNED AREA REHABILITATION

LAIDLAW FIRE

BLM/ TWIN FALLS DISTRICT/ SHOSHONE FIELD OFFICE
IDAHO STATE OFFICE

FIRE BACKGROUND INFORMATION

Fire Name	**Laidlaw**
Fire Number	**G1HV**
District/Field Office	**Twin Falls/Shoshone (Craters of the Moon National Monument**
Admin Number	**LLIDT03100**
State	**Idaho**
County(s)	**Minidoka**
Ignition Date/Cause	**7/8/2012 / Lightning**
Date Contained	**7/10/2012**

Jurisdiction	**Acres**
BLM	7,384
State	494
Private	0
Other	57 (NPS)

Total Acres	7,935
Total Costs	$110,000
Costs to LF2200000	$98,000
Costs to LF3200000	$12,000

Status of Plan Submission (check one box below)

X	Initial Submission of Complete Plan
	Amendment
	Updating or Revising the Initial Submission

PART 1 - PLAN SUMMARY

BACKGROUND INFORMATION ON THE FIRE

The Laidlaw fire ignited on July 8, 2012 from a lightning strike. The fire is located entirely in the Craters of the Moon National Monument and Preserve, roughly 20 miles northeast of Kimama, in Laidlaw Park. Total, the fire burned 7,935 acres, 57 of which are administered by the National Park Service (NPS), and 494 acres by the Idaho State Department of Lands (IDL). The remaining 7,384 acres is Bureau of Land Management (BLM).

The majority of the fire had previously burned in the 2007 Bear Den Butte fire, with the exception of 516 acres on the north end. A grass and forb mix was drill seeded on 6,639 acres and 7,399 acres were aerially broadcast seeded with a mix of Wyoming and Basin big sagebrush as part of the ES&BAR plan for that fire in 2008. The sagebrush that had regenerated since application following the Bear Den Butte fire, as well as remaining previously unburned sagebrush, was lost in this most recent fire. Several seeding treatments were implemented in 2008, varied by management objectives, and included to varying degrees the following species:

- Bluebunch wheatgrass
- Indian ricegrass
- Basin wildrye
- Siberian wheatgrass
- Tall wheatgrass
- Sherman big bluegrass
- Bottlebrush squirreltail
- Sainfoin
- Munroe globemallow
- Blue penstemon
- Arrowleaf balsamroot
- Utah sweetvetch
- Antelope bitterbrush

The area lies in Preliminary Priority Habitat for Greater sage-grouse, was a mix of Key and R1 habitat, considered nesting, brood-rearing and winter habitat, and in close proximity to lek areas. The expansion of noxious weeds, such as rush skeletonweed and diffuse knapweed, is also a concern. In the Wilderness Study Area (WSA), 1,848 acres also burned.

LAND USE PLAN CONSISTENCY

The following treatments are proposed under this Emergency Stabilization and Burned Area Rehabilitation (ES & BAR plan):

Emergency Stabilization
S3 Aerial Seeding
S5 Noxious Weeds
S12 Closures (Livestock)

Burned Area Rehabilitation
R5 Noxious Weeds

The applicable land use plan is the Craters of the Moon National Monument and Preserve Management Plan (Craters MP), which was approved in September 2006 and provides a framework for cooperative management of Monument lands by the NPS and the BLM.

In relation to ESR activities, the plan states:

- Emphasis of protection of vegetation resources in North Laidlaw Park
- Maintaining a road network suitable for aggressive fire suppression and restoration activities within the Monument
- Promoting a proactive Integrated Weed Management Program
- Proactively protecting and restoring sagebrush steppe communities

Additionally, the Craters MP states "In the event of wildland fire, burned areas will be rehabilitated when necessary to restore the proper mosaic of sagebrush species and subspecies, along with a diverse perennial understory, and to suppress invasive and noxious weeds" (p.28). The Craters MP also indicates that native plants will be emphasized in rehabilitation and restoration projects (p.27) and allows that restoration treatments may be active or passive and may include but are not limited to the following: prescribed fire, thinning, mowing, herbicide treatment, seeding, temporary removal of livestock and/or changes in grazing regimes or facilities, and road closures (p. 26).

Furthermore, Washington Office Instructional Memorandum (WO IM) 2012-043 provides interim management direction for the protection of Preliminary Priority Sage-grouse Habitat (PPH) and includes guidance for Wildfire Emergency Stabilization and Burned Area Rehabilitation: "In Emergency Stabilization and Rehabilitation plans, prioritize re-vegetation projects to (1) maintain and enhance unburned intact sagebrush habitat when at risk from adjacent threats; (2) stabilize soils; (3) reestablish hydrologic function; (4) maintain and enhance biologic integrity; (5) promote plant resiliency; (6) limit expansion or dominance or invasive species; and (7) reestablish native species."

The proposed treatments in this ES & BAR plan conform to the Craters MP and guidelines identified in WO IM 2012-043. The ESR team developed objectives and treatments which respond to the identified issues and concerns. The BLM would evaluate this plan based on the success or failure in meeting these objectives.

Aerial Seeding/S3: Direction for vegetation and wildlife management in the Craters MP includes "species composition in key Greater sage-grouse habitat will reflect site potential" and "native plant communities sustain biodiversity and provide habitat for native wildlife." Aerial seeding of sagebrush meets these objectives and is in conformance with the Craters MP.

Noxious Weeds/S5/R5: Management objectives in the Craters MP include "preventing or limiting the spread of noxious weeds using integrated weed management perpetuates the natural condition and biodiversity of the planning area". Planning for treatments and activities that meet

this objective is in conformance with the Crater's MP.

Closures (Livestock)/S12: The management restrictions, conservation measures and guidelines for livestock grazing on page 45 directs that current livestock use authorizations will be maintained until Idaho Standards for Rangeland Health evaluations or similar NEPA-compliant decisions identify the need for adjustments in livestock use to meet standards, vegetation, livestock, or resource objectives. Closing the burned area under the rehabilitation plan to grazing would ensure that the area recovers and is in conformance with the Craters MP.

COST SUMMARY TABLES

Emergency Stabilization (LF20000ES):

Action/ Spec. #	Planned Action	Unit	# Units	Unit Cost	FY12	FY13	FY14	FY15	Total Cost
S1	**Planning (Project Mgmt.)**	WM's	3		$0	$2,000	$2,000	$2,000	$6,000
S3	**Aerial Seeding**	Acres	3,680	$20.92	$55,000	$22,000	$0	$0	$77,000
S5	**Noxious Weeds**	Acres	7,384	$0.81	$0	$6,000	$0	$0	$6,000
S12	**Closures**	No.	1	$0.00	$0	$0	$0	$0	$0
S13	**Monitoring**	Acres	7,384	$1.22	$0	$3,000	$3,000	$3,000	$9,000
TOTAL COSTS					$55,000	$33,000	$5,000	$5,000	$98,000

Burned Area Rehabilitation (LF32000BR):

Action/ Spec. #	Planned Action	Unit	# Units	Unit Cost	FY13	FY14	FY15	Total Cost
R5	**Noxious Weeds**	Acres	7,384	$0.81	$0	$6,000	$6,000	$12,000
TOTAL COSTS					$0	$6,000	$6,000	$12,000

PART 2 – POST-FIRE RECOVERY ISSUES AND TREATMENTS

Issues relate to resource problems caused by the wildfire and include both the immediate wildfire effects as well as effects predicted to occur as a result of the wildfire. Determining the appropriate funding code must be based on the scope of the issue, purpose of the treatment, and the availability of funds.

EMERGENCY STABILIZATION ISSUES AND TREATMENTS

Emergency Stabilization Objectives: "determine the need for and to prescribe and implement emergency treatments to minimize threats to life or property or to stabilize and prevent unacceptable degradation to natural and cultural resources resulting from the effects of a fire." 620DM3.4

Emergency Stabilization Priorities: 1). Human Life and Safety, and 2). Property and unique biological (designated Critical Habitat for Federal and State listed, proposed or candidate threatened and endangered species) and significant heritage sites. 620DM3.7

ES Issue 1 - Human Life and Safety. N/A

ES Issue 2 - Soil/Water Stabilization. Placing structures to slow soil and water movement, stabilizing soil to prevent loss or degradation or productivity, increasing road drainage frequency and/or capacity to handle additional post-fire runoff, installing protective fences or barriers to protect treated or recovering areas.

The Laidlaw Park Allotment was affected by the Laidlaw fire and the burned area will be rested from livestock grazing under the ES & BAR plan to allow the vegetation to recover naturally and with the selected treatments. Rest on the seeded area would be implemented by the Range program until monitoring shows that the area meets objectives for the resumption of livestock grazing.

Treatment/Activity: *S12 Closures (livestock)*

A. Treatment/Activity Description. *Portions of the Thumb and South Well pastures burned in the Laidlaw Fire. These areas would be rested from livestock grazing to allow the previously seeded grasses and forbs to recover, and the proposed treatments to establish.*

B. How does the treatment relate to damage or changes caused by the fire? *The purpose of this treatment is to rest the burned area from livestock grazing to provide the opportunity for existing vegetation resources to stabilize the burned area and seeding efforts to establish. Establishment of a perennial plant community would inhibit the expansion of invasive vegetation and stabilize soil resources.*

C. Why is the treatment/activity reasonable, within policy, and cost effective? *No costs under ES are associated with livestock closures.*

ES Issue 3 - Habitat for Federal/State Listed, Proposed, or Candidate Species.

The burn negatively affected key Greater sage-grouse habitat. Sage-grouse are dependent on diverse sagebrush steppe plant communities for their year round habitat needs. Productive sage-grouse nesting habitat should have 15-25% sagebrush canopy cover with a structurally diverse perennial herbaceous understory. Winter habitat must have abundant sagebrush, the sage-grouse's only winter food, exposed under all possible snow depths. Due to the wildfire, current conditions are not optimal for sage-grouse forage, nesting security cover, or winter habitat. Habitat conditions are not expected to recover naturally without a seeding effort.

Treatment/Activity: *S3 Aerial Seeding*

A. Treatment/Activity Description. *Approximately 3,680 acres have been identified to be aerially seeded with a mix of Wyoming big sagebrush and basin big sagebrush. The seed will be applied aerially by a fixed wing aircraft or helicopter, and is proposed to occur in late FY12 or early FY13. The seed would be applied in strips, effectively covering one-half of the project area.*

B. How does the treatment relate to damage or changes caused by the fire? *This treatment will aid in the reestablishment of pre-fire vegetation that more closely resembles the structural and species composition and diversity of the native plant community to help achieve a healthy, functioning rangeland. Accelerating the rate of reestablishment of sagebrush is important to maintaining the value of the area as sage-grouse nesting, brood-rearing, and wintering habitat. Sagebrush is also an important component of suitable habitat for a number of other sensitive sagebrush obligate species. The wildfire removed existing sagebrush cover and killed sagebrush seedlings that were growing from the efforts of past ES & BAR activities. Sagebrush is not anticipated to recover naturally without providing an additional seed source.*

C. Why is the treatment/activity reasonable, within policy, and cost effective? *The treatment and activities are reasonable for the type of issues found on the site. Contracting costs for aerial application are typical for the Shoshone Field Office and Twin Falls District area. The cost of seed can vary from year to year dependent on availability.*

ES Issue 4 - Critical Heritage Resources. *N/A*

ES Issue 5 - Invasive Plants and Weeds.

Seeding to prevent establishment of invasive plants and direct treatment of invasive plants. Such actions will be specified in the emergency stabilization plan only when immediate action is required and when standard treatments are used that have been validated by monitoring data from previous projects, or when there is documented research establishing the effectiveness of such actions. Integrated pest management techniques can be used to minimize the establishment of non-native invasive species within the burned area. When there is an existing approved management plan that addresses non-native invasive species, emergency stabilization treatments may be used to stabilize the invasive species.

The following is a list of common pre-burn vegetation in order of dominance. The list was developed using field observations, fuels monitoring and habitat assessment framework sites

from within and in close proximity to the burned area.

Common Pre-burn Vegetation:

Shrubs:
Wyoming big sagebrush (*Artemisia tridentata wyomingensis)*
Basin big sagebrush (*Artemisia tridentata tridentata)*
Grasses:
Bluebunch wheatgrass (*Pseudoroegneria spicata)*
Snake River Wheatgrass (*Elymus wawyensis*)
Crested wheatgrass *(Agropyron cristatum)*
Sandberg bluegrass *(Poa secunda)*
Cheatgrass *(Bromus tectorum)*

Ecological Site(s):

Loamy 8-12" Basin Big Sagebrush/Bluebunch Wheatgrass
Loamy 8-12" Wyoming Big Sagebrush/Bluebunch Wheatgrass-Thurber's Needlegrass

Soil-vegetation correlation information indicates that the burn area is located primarily on a Loamy 8-12" Basin Big Sagebrush/Bluebunch Wheatgrass, with inclusions of Loamy 8-12" Wyoming Big Sagebrush/Bluebunch Wheatgrass-Thurber's Needlegrass ecological sites.

Rush skeletonweed, diffuse knapweed, and cheatgrass are the most common invasive species and would be a major component of the burn area without treatment. Re-vegetation with desirable, competitive species would provide effective competition against annual vegetation and noxious weeds in the long term.

Fire Intensity and Vegetation Cover:

The fire removed vegetation across the burned area. Vegetation in the fire area was a mixed perennial grass seeding from the Bear Den Butte fire treatment, and was beginning to establish well. Sagebrush had been seeded following that fire, as well, and was starting to establish. Roughly 560 acres had not burned recently, and were dominated by basin big sagebrush. These areas burned cleanly in the Laidlaw fire. The understory, especially the previously seeded areas, is expected to recover naturally, as long as noxious weed expansion is controlled. Aerial seeding of sagebrush is necessary to replace what was lost, however.

Diffuse knapweed (*Centaurea diffusa*) and rush skeletonweed (*Chondrilla juncea*) are the two noxious weed species of concern in the Laidlaw Fire area. Populations of these plants have been mapped and treated in the past in proximity to the burned area, and have a high probability of expanding into the burned area. Noxious weed control efforts are necessary to reduce the probability of these weeds increasing. Spot herbicide spraying and biological control would be proposed under rehabilitation to suppress the expansion of these weeds.

Treatment/Activity: *S5 Noxious Weeds*

A. Treatment/Activity Description. *Noxious weed inventory and control in the burned area would be done in the first year following the fire, to directly treat the expected weeds. Known locations of weeds would be treated the second and third year following the fire. All actions would be in accordance with the Shoshone District Noxious Weed Management Plan, Environmental Assessment #ID050-EA-92031. Diffuse knapweed and rush skeletonweed are the primary targets.*

B. How does the treatment relate to damage or changes caused by the fire? *The objective of this treatment is to identify and control the anticipated noxious weed increase using spot herbicide application of the burned area. Diffuse knapweed and rush skeletonweed are found adjacent to the burned area. These are expected to increase due to the removal of existing plant cover by the wildfire creating a situation conducive to the establishment of noxious weeds.*

C. Why is the treatment/activity reasonable, within policy, and cost effective? *Weed treatments in this Field Office typically run about $0.81 per acre. Field work would be combined with other weed treatments in the area for cost efficiency.*

BURNED AREA REHABILITATION ISSUES AND TREATMENTS

Burned Area Rehabilitation Objectives. 1) To evaluate actual and potential long-term post-fire impacts to critical cultural and natural resources and identify those areas unlikely to recover naturally from severe wildland fire damage; 2) To develop and implement cost-effective plans to emulate historical or pre-fire ecosystem structure, function, diversity, and dynamics consistent with approved land management plans, or if that is infeasible, then to restore or establish a healthy, stable ecosystem in which native species are well represented; and 3) To repair or replace minor facilities damaged by wildland fire. 620DM3.4

Burned Area Rehabilitation Priorities. 1) To repair or improve lands damaged directly by a wildland fire; and 2) To rehabilitate or establish healthy, stable ecosystems in the burned area. 620DM3.8

BAR Issue 1 - Lands Unlikely to Recover Naturally. *N/A*

BAR Issue 2 - Weed Treatments. Chemical, manual and mechanical removal of invasive species, and planting of native and non-native species, restore or establish a healthy, stable ecosystem even if this ecosystem cannot fully emulate historical or pre-fire conditions. All 7,384 acres of the burned public land will be re-inventoried and treated as needed for noxious weeds in FY2014-2015. The objective of this treatment is to identify and control the expected noxious weed increase using spot herbicide application on the burned area. Noxious weeds could increase due to the removal of existing plant cover by the wildfire.

Treatment/Activity: *R5 Noxious Weeds*

Diffuse knapweed (*Centaurea diffusa*) and rush skeletonweed (*Chondrilla juncea*) are the two noxious weed species of concern in the Laidlaw Fire area. Populations of these plants have been

mapped and treated in the past in proximity to the burned area, and have a high probability of expanding into the burned area. Noxious weed control efforts are necessary to reduce the probability of these weeds increasing. Spot herbicide spraying and biological control would be proposed under rehabilitation to suppress the expansion of these weeds.

A. Treatment/Activity Description. *Noxious weed inventory and control in the burned area would be done in the first year following the fire, to directly treat the expected weeds. Known locations of weeds would be treated the second and third year following the fire. All actions would be in accordance with the Shoshone District Noxious Weed Management Plan, Environmental Assessment #ID050-EA-92031. Diffuse knapweed and rush skeletonweed are the primary targets.*

B. How does the treatment relate to damage or changes caused by the fire? *The objective of this treatment is to identify and control the anticipated noxious weed increase using spot herbicide application of the burned area. Diffuse knapweed and rush skeletonweed are found adjacent to the burned area. These are expected to increase due to the removal of existing plant cover by the wildfire creating a situation conducive to the establishment of noxious weeds.*

C. Why is the treatment/activity reasonable, within policy, and cost effective? *Weed treatments in this Field Office typically run about $0.81 per acre. Field work would be combined with other weed treatments in the area for cost efficiency.*

BAR Issue 3 - Tree Planting. *N/A*

BAR Issue 4 - Repair/Replace Fire Damage to Minor Facilities. *N/A*

PART 3 – DETAILED TREATMENT COST TABLE

Emergency Stabilization		Units	FY12	FY13	FY14	FY15	Total Costs
S1	***Planning (Plan Prep/Project Mangt)***						
	Project Management Field Office	WM's		2,000	2,000	2,000	6,000
	Total		0	2,000	2,000	2,000	6,000
S3	***Aerial Seeding***						
	Contract	Total		19,000			19,000
	Contract Administration	WM's		2,000			2,000
	Seed	Total	55,000				55,000
	Seed Testing	Total		1,000			1,000
	Total		55,000	22,000	0	0	77,000
S5	***Noxious Weeds***						
	Labor	WM's		4,000			4,000
	Travel/Vehicles	Total		1,000			1,000
	Supplies/Materials	Total		1,000			1,000
	Total		0	6,000	0	0	6,000
S13	***Monitoring***						
	Labor	WM's		2,500	2,500	2,500	7,500
	Travel/Vehicles	Total		500	500	500	1,500
	Total		0	3,000	3,000	3,000	9,000
	EMERGENCY STABILIZATION TOTALS		$55,000	$33,000	$5,000	$5,000	$98,000

Burned Area Rehabilitation		Units	FY13	FY14	FY15	Total Costs
R5	***Noxious Weeds***					
	Labor	WM's		4,000	4,000	8,000
	Travel/Vehicles	Total		1,000	1,000	2,000
	Supplies/Materials	Total		1,000	1,000	2,000
	Total		0	6,000	6,000	12,000
	BURNED AREA REHABILITATION TOTALS		$0	$6,000	$6,000	$12,000

PART 4 – SEED LISTS

AERIAL SEED

Species	% PLS	Seeds/lb. (bulk)	Total Seeds/Acre (bulk)	PLS Seeds/ac.	PLS Seeds/sq. ft.	Aerial Seeding (acres)	Lbs/Acre	Total Pounds	Cost per lb	Total Costs
Wyoming Sage	12%	2,500,000	1,250,000	150,000	3.44	3,692	0.5	1,840	15.00	27,600.00
Basin Sage	12%	2,500,000	1,250,000	150,000	3.44	3,692	0.5	1,840	15.00	27,600.00
TOTALS					**6.89**		**1.00**	**3,680**		**55,200.00**

PART 5 - NATIVE/NON-NATIVE PLANT WORKSHEET

A. Proposed Native Plants in Seed Mixtures (Both ES & BAR Treatments)

1. Are the native plants proposed for seeding adapted to the ecological sites in the burned area?
Yes. Rationale: *The proposed species are adapted to the ecological sites in the proposed treatment area. These species have been utilized in similar ecological sites in the Craters of the Moon National Monument and Preserve.*

2. Is seed or seedlings of native plants available in sufficient quantity for the proposed project?
Yes Rationale: *Generally, the species proposed for this project are available in sufficient quantities.*

3. Is the cost and/or quality of the native seed reasonable given the project size and approved field unit management and Plan objectives?
Yes Rationale: *The seed proposed for use has been increasingly utilized in recent years for stabilization, rehabilitation, and restoration. The demand has resulted in increased collection and decreased price.*

4. Will the native plants establish and survive given the environmental conditions and the current or future competition from other species in the seed mix or from exotic plants?
Yes Rationale: *The proposed species are adapted to the ecological sites in the proposed treatment area. These species have shown the ability to establish in the existing conditions when used in past treatments.*

5. Will the existing or proposed land management practices (e.g. wildlife populations, recreation use, livestock, etc.) maintain the seeded native plants in the seed mixture when the burned area is re-opened?
Yes Rationale: *The area will be rested from livestock grazing until the resource objectives listed in this ES & BAR plan are met. This will help the new seeding treatment become established. Prior to the resumption of livestock grazing the treatment, areas will have to meet minimum criteria (see monitoring plan) before livestock grazing may resume.*

B. Proposed Non-native Plants in Seed Mixture (Both ES & BAR Treatments)

The proposed seed mix does not contain non-native plants.

C. Proposed Seed Species – Natives & Non-Natives (Both ES & BAR Treatments)

Non-native Plants	Native Plants
	Wyoming big sagebrush (*Artemisia tridentata wyomingensis)*
	Basin big sagebrush (*Artemisia tridentata tridentata)*

PART 6. – COST-RISK ANALYSIS

A. Probability of Treatments Successfully Meeting Objectives

Action/ Spec. #	Planned ES Action (LF20000ES)	Unit (acres, WMs, number)	# Units	Total Cost	% Probability of Success
S3	Aerial Seeding	Acres	3,680	$77,000	70
S5	Noxious Weeds	Acres	7,384	$6,000	100
			TOTAL COSTS:	$83,000	

Action/ Spec. #	Planned BAR Action (LF32000BR)	Unit (acres, WMs, number)	# Units	Total Cost	% Probability of Success
R5	Noxious Weeds	**Acres**	7,384	$12,000	90
			TOTAL COSTS:	$12,000	

B. Cost Risk Summary

1. Are the risks to natural resources and private property **acceptable** as a result of the fire if the following actions are taken?

Proposed Action *Yes* Rationale for answer: *The proposed actions are anticipated to help stabilize the burned area, re-establish shrub cover, and help protect BLM lands and adjacent IDL and NPS lands from further expansion of noxious weeds.*
No Action *No* Rationale for answer: *Stabilization would occur at a slower rate, shrub re-establishment would not occur as rapidly, and noxious weeds would expand, compromising wildlife values in the burned area and on adjacent unburned lands.*
Alternative(s) Rationale for answer: *N/A*

2. Is the probability of success of the proposed action, alternatives or no action acceptable given their costs?

Proposed Action *Yes* Rationale for answer: *Monitoring and observation of recent weed control efforts in similar soils and precipitation zones indicate that success would be high. Normal climatic conditions and the exclusion of livestock grazing for the period of seeding establishment and/or on-site vegetation recovery would increase the probability of success.*
No Action *No* Rationale for answer: *There is a high potential for noxious weeds expanding into the burned area and onto adjacent unburned lands.*
Alternative(s) Rationale for answer: *N/A*

3. Which approach will most cost-effectively and successfully attain the objectives and therefore is recommended for implementation from a Cost/Risk Analysis standpoint?

Proposed Action |X|,

Alternative(s) |__|,
No Action |__|

Comments: None

C. Risk of Resource Value Loss or Damage

No Action - Treatments Not Implemented (check one)

Resource Value	N/A	None	Low	Medium	High
Unacceptable Loss of Topsoil				X	
Weed Invasion					X
Unacceptable Loss of Vegetation Diversity				X	
Unacceptable Loss of Vegetation Structure				X	
Unacceptable Disruption of Ecological Processes				X	
Off-site Sediment Damage to Private Property		X			
Off-site Threats to Human Life		X			
Other-loss of Access Road Due to Plugged Culverts	X				

Proposed Action - Treatments Successfully Implemented (check one)

Resource Value	N/A	None	Low	Medium	High
Unacceptable Loss of Topsoil			X		
Weed Invasion			X		
Unacceptable Loss of Vegetation Diversity			X		
Unacceptable Loss of Vegetation Structure			X		
Unacceptable Disruption of Ecological Processes			X		
Off-site Sediment Damage to Private Property		X			
Off-site Threats to Human Life		X			
Other-loss of Access Road Due to Plugged Culverts	X				

PART 7 – MONITORING PLAN

Monitoring and evaluation of the treatments in this plan would be applied to ensure that treatments are effectively, properly implemented and maintained. Monitoring methods may be qualitative or quantitative, and would be commensurate with the level of treatment complexity and extent. Monitoring and evaluation information would provide adaptive management feedback to improve ES & BAR treatment performance. Monitoring would be the responsibility of the BLM interdisciplinary team. An annual monitoring summary report would be submitted documenting treatment effectiveness.

Treatment/Activity: **S3 Aerial Seeding**

1) Treatment Objectives: *The objective of the seeding treatment is to establish a measurable shrub component in three years. The aerial seeding treatment of sagebrush would be considered effective if:*
    a. *Sagebrush seedlings average 0.1 seedlings per square meter across all density plots, or;*
    b. *In qualitative surveys they are found to be common.*

2) Describe how implementation will be monitored:

Implementation is monitored through contract administration. Any changes from the planned implementation would be noted in the project file "as built" discussion.

3) Describe how effectiveness will be monitored, how it will be measured, and within what time period.

The methods used to monitor the treated area would include field observations, photo plots, and cover transects utilizing the line-point intercept and density plot methods. Plots would be randomly established through the treated area. Effectiveness monitoring of the aerial seeding will be done for a period of three growing seasons.

Treatment/Activity: **S5/R5 Noxious Weed Treatments**

1) Treatment Objectives:

    Diffuse knapweed and rush skeletonweed are the primary weeds of concern in the burn area. It is expected that these weeds would expand their range as a result of the fire. Since these weeds are not uniformly distributed across the burn area, a quantifiable objective cannot be determined until the first year inventory occurs.

    The objective for the first growing season is to conduct an inventory of the burn area and treat any noxious weeds discovered on the burn.

    The objective for the second and third years is to decrease the acreage needing treatment as determined by the first year inventory.

2) Describe how implementation will be monitored:

During the first growing season treatment, a detailed map of location, weed species sprayed,

and the amount of herbicide utilized would be documented. The second and third year objective would be measured by the number and size of locations sprayed and the amount of herbicide utilized.

3) Describe how effectiveness will be monitored, how it will be measured, and within what time period.

At the end of three years of treatment, the herbicide spray data would be summarized. If further treatment is required beyond the third year, then the responsibility for treatment would be forwarded to the Twin Falls District normal weed spraying program.

Treatment/Activity: **S12 Closure (Livestock)**

1) Treatment Objectives:

Exclusion of livestock is critical for the recovery of burned vegetation or establishment and protection of new seedings. The burn area and seed treatment area would be closed to livestock grazing for a minimum period of two growing seasons to promote recovery of burned vegetation and to facilitate the establishment of seeded species as specified in the 2005 Shoshone and Burley Normal Fire Rehabilitation Plan (#ID-077-2004-008).

2) Describe how implementation will be monitored:

Resumption of livestock grazing would ultimately depend on monitoring and meeting of ES plan ground seeding and natural recovery objectives. Recovery of the treated area would be monitored for availability to grazing on a yearly basis. The monitoring for grazing availability and recommendations for opening the burn area to livestock would be the responsibility of an interdisciplinary team.

Implementation is monitored through rangeland management administration. A grazing decision would be issued closing the burn area to livestock grazing.

3) Describe how effectiveness will be monitored, how it will be measured, and within what time period.

Natural recovery areas would be considered recovered and available for grazing when:

- *Recovered herbaceous vegetation is providing sufficient ground cover to protect the site from accelerated erosion and expansion/conversion to annual grasses and noxious weeds. The amount of bare mineral soil (lacking cover of plants, litter, or biological soil crust) is within 10% of what would be expected for the site. Recommended study methods include line-point intercept or step point cover methods and photo points.*
- *A qualitative visual assessment of the following would also be considered:*
    - *Plant vigor (perennial plants)*
    - *Precipitation information during the non–growing (winter) and growing (spring through early summer) seasons*

    - *Competition with invasive annual plants and noxious weed species*
    - *Seed Production*
- *An evaluation of collected monitoring data is completed documenting that reintroducing grazing to the area would not cause a downward trend in vegetation*

PART 8 - MAPS

1. Fire Perimeter
2. Colored Land Status Map
3. Seeding or Seedling Treatment areas

PART 9 – REVIEW, APPROVALS, and PREPARERS

TEAM MEMBERS

Position	Team Member (Agency/Office)	Initial and Date
Team Leader	Danelle Nance (BLM, Shoshone FO)	DN 7/23/2012
Operations	Scott Uhrig (BLM, Twin Falls DO)	SU 7/23/2012
NEPA Compliance & Planning	Lisa Cresswell (BLM, Shoshone FO)	LC 7/23/2012
Cultural Resources/Archeologist	Lisa Cresswell (BLM, Shoshone FO)	LC 7/23/2012
Rangeland Mgt. Specialist	Dan Patten (BLM, Shoshone FO)	DP 7/24/2012
Wildlife Biologist	Gary Wright (BLM, Shoshone FO)	GW 7/23/2012
GIS	Cassie Mavencamp (BLM, Twin Falls DO)	CM 7/23/2012
Resource Advisor(s) on Fire	Dan Patten (BLM, Shoshone FO)	DP 7/24/2012

PLAN APPROVAL

"The Agency Administrator is responsible for developing, implementing, and evaluating emergency stabilization and rehabilitation plans, treatments, and activities." 620 DM 3.5C

/s/ Dan Patten 7/24/2012

ACTING FIELD OFFICE MANAGER DATE

FUNDING APPROVAL

The funding of ES treatments is approved through the appropriate administrative approval level in coordination with the National Office Budget Shop. As funding is available, ES funding requested within a plan that totals below $100,000 may be approved by the State Director, while ES funding of $100,000 and above must be approved by the WO. If the ES funding cap is reached, all ES funding will be approved through the National Office in coordination with State ES&R Coordinators to determine highest priority projects. Funding of all BAR treatments is accomplished through a scoring process and is dependent on accurate entries into NFPORS. All funding is approved and allocated on a year-by-year basis.

Laidlaw - G1HV Fire Rehabilitation